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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BOTTORFF, CHRISTOPHER

ART UNIT

PAPER NUMBER

3618

DATE MAILED: 10/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,592

Applicant(s)

MITCHELL, WALTER

Examiner

Christopher Bottorff

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 7-9, 15, 22-24, 31, 35, 36, 41, 45, 46 and 51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-14, 16-21, 25-30, 32-34, 37-40, 42-44 and 47-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB08)
Paper No(s)/Mail Date 11/12/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

This application contains claims directed to the following patentably distinct species of the claimed invention:

- I. The arrangement depicted in Figures 1-5, 7, and 15,
- II. The arrangement depicted in Figures 6 and 8,
- III. The arrangement depicted in Figures 10 and 11,
- IV. The arrangement depicted in Figures 12 and 13, and
- V. The arrangement depicted in Figures 9 and 14.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-5, 10-13, 16-20, 25, 27-29, 32, 33, 37-39, 42, 43, and 47-49 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

Art Unit: 3618

are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with Lawrence Colton on October 14, 2005 a provisional election was made without traverse to prosecute the invention of species I, as depicted in figures 1-5, 7, and 15 and defined in claims 1-6, 10-14, 16-21, 25-30, 32-34, 37-40, 42-44, and 47-50. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7-9, 15, 22-24, 31, 35, 36, 41, 45, 46, and 51 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on November 12, 2003 was considered by the examiner.

Art Unit: 3618

Claim Objections

Claim 20 is objected to because of the following informalities: the limitation "further comprises at least two fan units are positioned one behind the other" is not clearly expressed. Inserting the term "that" between "units" and "are" would be clearer. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 32-34, 37-40, 42-44, and 47-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 32 recites the limitation "the at least one fan unit" in lines 2-3 and 8. There is insufficient antecedent basis for this limitation in the claim. Similarly, claim 42 recites the limitation " the at least one fan unit" in lines 3-4 and 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 40 recites the limitation "the fan unit" in line 1. However, this limitation is not clear as to which of the two fan units of claim 32 is defined by the limitations of claim 40. The disclosure suggests that both fan units comprise the features defined in claim 40. For the purposes of examination, "the fan unit" has been interpreted as defining each of the fan units.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 10-14, 16-20, 25, 27-30, 32-33, 37-40, 42-43, and 47-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Finley US 5,287,004.

Finley discloses a combination of an at least partially electrically powered vehicle and a power system for powering the vehicle, including the electrical systems of the vehicle. See Figure 1 and column 1, line 53, through column 2, line 3. The power system comprises two fan units 1 and two electric alternators 5 associated with each of the two fan units 1. See Figures 1 and 2. The two fan units 1 each comprise a central axis along rod 4 and a plurality of fan blades 3 that are at least three fan blades. See Figure 2. The fan blades 3 extend axially from and span substantially the length of the central axis. See Figure 2. The two fan units 1 are mounted on the vehicle laterally across at least a portion of the vehicle. See Figure 1.

The fan units 1 are positioned one behind the other. See Figure 1. The fan blades 3 are concaved and, since the concave curvature extends from the end of the blade adjacent rod 4 to the end of the blade opposite rod 4, the blades are curved at the ends opposite the central axis. See Figure 2. The central axis is perpendicular to a centerline extending from the front of the vehicle to the back of the vehicle. See Figure 1. Also, fewer than the plurality of fan blades 3 are contacted by a driving force at any

Art Unit: 3618

given time and position since at least one blade is sheltered from the driving force at any given time and position. See Figures 4 and 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 21, 34, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finley US 5,287,004 in view of Waterbury US 3,444,946.

Finley desires to blend the fan system with the body of the vehicle. See column 2, lines 14-15. Also, although the preferred embodiment of Finley locates the fan units in different horizontal planes, as shown in Figure 1, Finley recognizes that various modifications may be adopted. See column 4, lines 10-14. However, Finley does not specifically disclose locating two fan units in the same horizontal plane. However, Waterbury teaches the desirability of arranging two fan units of a vehicle power system in the same horizontal plane. See Figures 1 and 2 and column 1, lines 28-48. From the teachings of Waterbury, arranging two fan units of Finley in the same horizontal plane would have been obvious to one of ordinary skill in the art at the time the invention was made. This modification would help to blend the system with the body of the vehicle.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Finley US 5,287,004 in view of Vu US 6,838,782.

Although Finley discloses that his device can be used for various types of vehicles (see column 1, line 65, through column 2, line 3), Finley does not disclose that his system could be used specifically on a vehicle that contains a hybrid gasoline and electrically driven engine. However, Vu teaches the desirability of using a fan powered vehicle power system on a hybrid-electric vehicle, which contains a hybrid gasoline and electrically driven engine. See column 2, lines 32-35 and 44-47, and column 1, lines 53-67. From the teachings of Vu, using the system of Finley on a vehicle that contains a hybrid gasoline and electrically driven engine would have been obvious to one of ordinary skill in the art at the time the invention was made. This modification would produce a vehicle with low pollutant emissions and would help to extend the range of the conventional hybrid-electric vehicle by assisting in recharging the batteries.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Zelnik, Dutchak, Stoeckert, Horvat, Hull, deceased et al., Howe, McFarland, Trumpy, Bernard, Damron et al., Forrey, Mula, Jr., Hakala, Wu, Liskey et al., DePaoli, and Yu disclose various fan drive power systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (571) 272-6692. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

Art Unit: 3618

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher Bottorff